

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A pharmaceuticals characterized by general formula (I)



wherein

V denotes a peptide with a binding sequence $-X^1-X^2$ -Val-Tyr-Ile-His-Pro- $X^8-X^9-X^{10}$,
(SEQ ID NO. 1)

L denotes bond or a linker,

Z denotes a chelating agent suitable for ~~group that optionally can~~ carrying a radionuclide
~~an imaging moiety~~ M,

X^1 denotes $-NY_1-(CH_2)_m-CO-$ where m is an integer from 1 to 10 and Y_1 is H or an
alkyl- or aryl-containing substituent,

X^2 denotes Arg, N-alkylated Arg, or ~~a Arg mimetic~~ Phe[4-guanidino] or Gly-4-
piperidyl[N-amidino],

X^8 denotes Gly, Phe, Phg, Hph, Bip, Ala, Tyr, His, Trp or Nal, ~~SEQ ID NO. 1~~

X^9 and X^{10} denote, independent of each other, Pro, Arg, His, Ala, Phe, Glu, Leu, Val, Ile,
Met, Trp, Asp or Lys ~~SEQ ID NO. 1~~ and where X^8 , X^9 and X^{10} together constitute an
ACE cleavage site;

and wherein the residues Val and Ile at position 3 and 5 respectively may optionally be
replaced with the amino acids cysteine or homocysteine capable of forming a bridging
unit wherein the bridge contains ~~ings~~ a $-CH_2-CH_2-$, $-S-CH_2-$, $-S-CH_2-S-$, lactam or $-S-S-$
unit,

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Z forms a bond with the amino acid X^1 optionally through the linker L, and

~~M where present denotes an imageable moiety capable of detection either directly or indirectly in a diagnostic imaging procedure~~ is selected from ^{67}Ga , ^{111}In , $^{81\text{m}}\text{Kr}$, ^{99}Mo , $^{98\text{m}}\text{Tc}$, ^{201}Tl , ^{68}Ga and ^{82}Rb .

2. (Currently Amended) A pharmaceutical according to claim 1 wherein the amino acid of X^1 , X^2 , X^8 , X^9 , X^{10} are independently selected from

X^1 denoting Gly

X^2 denoting Arg or N-Methyl-Arg

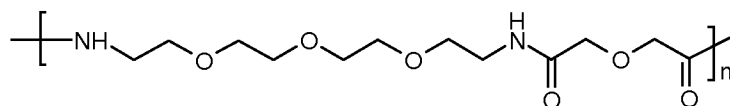
X^8 denoting Phe

X^9 denoting Pro, Arg, His, Ala, Phe, Glu, Leu, Val, Ile, Met, Trp, Asp or Lys ~~SEQ ID NO. 4~~ and

X^{10} denoting Pro, Arg, His, Ala, Phe, Glu, Leu, Val, Ile, Met, Trp, Asp or Lys ~~SEQ ID NO. 4~~.

3. (Currently Amended) A pharmaceutical according to claim 1 further comprising one or more biomodifier groups ~~are attached to any positions of the V and L groups of formula (I)~~

of formula (IV)

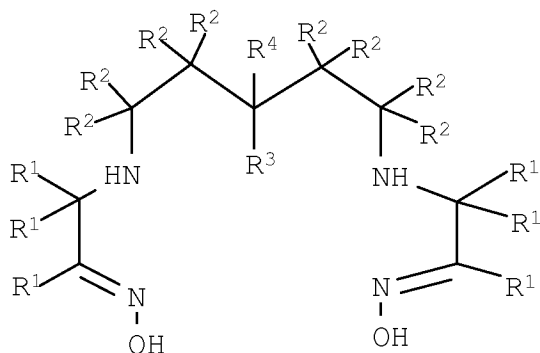


(IV)

wherein n equals an integer from 1 to 10 and where the C-terminal unit forms an amide bond attached to any positions of the V and L groups of formula (I).

4. (Cancelled) A pharmaceutical according to claim 1 wherein Z denotes a chelating agent.

5. (Original) A pharmaceutical according to claim 4 wherein Z denotes the chelating agent of formula (VII)



(VII)

wherein:

each R^1 , R^2 , R^3 and R^4 is independently H or C_{1-10} alkyl, C_{3-10} alkylaryl, C_{2-10} alkoxyalkyl, C_{1-10} hydroxyalkyl, C_{1-10} alkylamine, C_{1-10} fluoroalkyl, or 2 or more R groups, together with the atoms to which they are attached form a carbocyclic, heterocyclic, saturated or unsaturated ring.

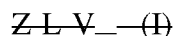
6. (Cancelled) A pharmaceutical according to claim 5 wherein M represents an imageable moiety for the use in diagnosis particularly in *in vivo* diagnosis comprising a moiety which emit or cause to emit detectable radiation, a moiety which affect local electromagnetic fields, moieties which absorb or scatter radiation energy, heavy metals and compounds thereof and moieties which generate a detectable substance.

7. (Currently Amended) A pharmaceutical according to claim 56 wherein M represents a gamma emitting moiety for Radio or SPECT imaging ~~comprising~~ selected from ^{67}Ga , ^{111}In , ^{123}I , ^{125}I , ^{131}I , $^{81\text{m}}\text{Kr}$, ^{99}Mo , $^{99\text{m}}\text{Tc}$ and ^{201}Tl and ~~^{133}Xe .~~

8. (Currently Amended) A pharmaceutical according to claim 56 wherein M represents a radio emitter with positron emitting properties for PET imaging comprising ^{11}C , ^{18}F , ^{68}Ga , ^{13}N , ^{15}O and ^{82}Rb .

9. (Currently Amended) A pharmaceuticals according to claim 24 characterized by

general formula (I)



wherein

V denotes a peptide with a binding sequence ~~X¹-X²-Val-Tyr-Ile-His-Pro-X⁸-X⁹-X¹⁰~~; SEQ ID NO. 1 wherein the amino acid of X¹, X², X⁸, X⁹, X¹⁰ are independently selected from

X¹ denoting Gly

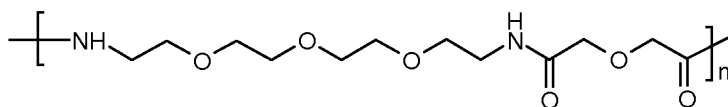
X² denoting Arg or N-Methyl Arg

X⁸ denoting Phe

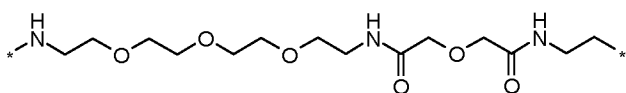
X⁹ denoting Pro, Arg, His, Ala, Phe, Glu, Leu, Val, Ile, Met, Trp, Asp or Lys SEQ ID NO. 1 and

X¹⁰ denoting Pro, Arg, His, Ala, Phe, Glu, Leu, Val, Ile, Met, Trp, Asp or Lys SEQ ID NO. 1.

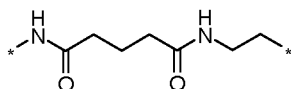
wherein L denotes a bond or a linker selected from compounds of formula NH-(CH₂)_m- optionally combined with -CO-(CH₂)_m-CO- where m denotes a positive integer from 1 to 10, one or more units of compounds of formula (IV) wherein n is an integer from 1 to 10, compounds of formula (X) or (VI)



Formula (IV)

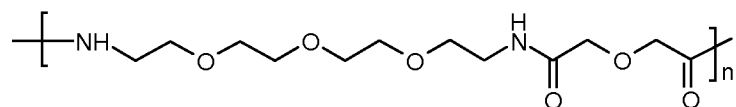


Formula (X)



Formula (VI)

~~Z denotes a chelating agent of formula (VII) that optionally can carry an imaging moiety M, and one or more biomodifier groups selected from monodisperse PEG building block comprising 1 to 10 units of said building block or the compound of formula IV,~~



Formula (IV)

~~wherein n equals an integer from 1 to 10 are attached to any positions of the V and L groups of formula (I).~~

10. (Original) Pharmaceutical formulation comprising a pharmaceutical of formula (I) of claim 1 together with one or more pharmaceutical acceptable additives and/or excipients.

11. (Cancelled) A kit for the preparation of a radiopharmaceutical composition of formula (I) comprising a peptide-chelate conjugate and a reducing agent.